

## CLAIMS

What is claimed is:

1. A method for controlling the flow of exchanged documents comprising the steps of:
  - 5 receiving a document by a recipient;
  - extracting and storing a plurality of GUID values associated with said document including a GUID for the document itself (SelfGUID), a GUID indicating a original predecessor document (OriginGUID) to which said received document is related, and a GUID indicating an immediate
  - 10 predecessor parent document (ParentGUID) to said received document;
  - composing a new document related to said received document;
  - performing historical participation analysis using said stored GUID values according to a set of user preferences to classify one or more potential recipients; and
  - 15 proposing at least one list of recipients of said new document according to said potential recipient classifications.
2. The method as set forth in Claim 1 wherein said step of extracting a plurality of GUID values from a received message comprises extracting a set of meta
- 20 data values.

3. The method as set forth in Claim 1 wherein said step of proposing a list of recipients comprises a step selected from the group of proposing a "To" list of addressees, proposing a "Carbon Copy" list of addressees, and proposing a "Blind Copy" list addressees.
4. The method as set forth in Claim 1 wherein said step of performing historical participating analysis comprises performing an analysis selected from the group of:
- (a) designating a potential recipient as inactive if said participant has not contributed a document within a specified period of time;
  - (b) designating a potential recipient as inactive if said potential recipient has not contributed a document within a specified recent number of messages;
  - (c) designating a potential recipient as inactive if said potential recipient does not belong to a top portion of a group of potential recipients when rank ordered by number of documents contributed within a specified period of time;
  - (d) designating a potential recipient as inactive if said participant has not contributed a specified threshold number of documents within a specified time period; and
  - (e) designating a potential recipient as inactive if said participant has

not contributed documents at a rate favorably comparable to an  
determined pace for an entire group of potential recipients.

5. The method as set forth in Claim 1 further comprising sending a  
5 notice to recipients who have been classified as inactive participants.
6. The method as set forth in Claim 1 wherein said step of composing a new  
document comprises composing a reply message.
- 10 7. The method as set forth in Claim 1 wherein said step of composing a new  
document comprises composing a forwarded message.
8. The method as set forth in Claim 1 wherein said step of proposing at least one  
list of recipients comprises a step selected from the group of:  
15 (a) replying to all document contributors and document recipients  
within a current branch of a conversation tree;  
(b) replying to document contributors and document recipients  
within an entire conversation tree;  
(c) replying to document contributors and document recipients  
20 classified as "active participants" within a current branch of a  
conversation tree;  
(d) replying only to document contributors and document recipients

as "passive participants" within a current branch of a  
conversation tree;

(e) replying only to document contributors and document recipients  
classified as "passive participants" within an entire tree of  
conversation;

(f) forwarding to all document contributors and document recipients  
within a current branch of a conversation tree;

(g) forwarding to all document contributors and document recipients  
within an entire conversation tree;

(i) forwarding only to document contributors and document recipients  
classified as "active participants" within a current branch of a  
conversation tree;

(j) forwarding only to document contributors and document recipients  
classified as "passive participants" within a current branch of a  
conversation tree; and

(k) forwarding only to document contributors and document recipients  
classified as "passive participants" within an entire tree of  
conversation.

9. The method as set forth in Claim 1 further comprising the steps of:
- associating an OriginGUID value with said new document having a value equal to the OriginGUID value of said received document;
  - 5 associating a ParentGUID value with said new document having a value equal to the SelfGUID of said received document; and
  - associating a new and unique SelfGUID value with said new document.
- 10 10. The method as set forth in Claim 1 further comprising composing a new document with new context by performing the steps of:
- associating a null OriginGUID value and null ParentGUID value with said new document; and
  - associating a new and unique SelfGUID value with said new
  - 15 document.
11. A computer readable medium encoded with software for controlling the flow of exchanged documents, said software performing the steps of:
- receiving a document by a recipient;
  - 20 extracting and storing a plurality of GUID values associated with said document including a GUID for the document itself (SelfGUID), a GUID indicating a original predecessor document (OriginGUID) to which said

received document is related, and a GUID indicating an immediate predecessor parent document (ParentGUID) to said received document;

composing a new document related to said received document;

performing historical participation analysis using said stored GUID

5 values according to a set of user preferences to classify one or more potential recipients; and

proposing at least one list of recipients of said new document according to said potential recipient classifications.

10 12. The computer readable medium as set forth in Claim 11 wherein said software for extracting a plurality of GUID values from a received message comprises software for extracting a set of meta data values.

13. The computer readable medium as set forth in Claim 11 wherein said software  
15 for proposing a list of recipients comprises software for performing a step selected from the group of proposing a "To" list of addressees, proposing a "Carbon Copy" list of addressees, and proposing a "Blind Copy" list addressees.

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14. The computer readable medium as set forth in Claim 11 wherein said software for performing historical participating analysis comprises software for performing an analysis selected from the group of:

- 5 (a) designating a potential recipient as inactive if said participant has not contributed a document within a specified period of time;
- (b) designating a potential recipient as inactive if said potential recipient has not contributed a document within a specified recent number of messages;
- 10 (c) designating a potential recipient as inactive if said potential recipient does not belong to a top portion of a group of potential recipients when rank ordered by number of documents contributed within a specified period of time;
- (d) designating a potential recipient as inactive if said participant has not contributed a specified threshold number of documents  
15 within a specified time period; and
- (e) designating a potential recipient as inactive if said participant has not contributed documents at a rate favorably comparable to an determined pace for an entire group of potential recipients.

20 15. The computer readable medium as set forth in Claim 11 wherein said software for sending a notice to recipients who have been classified as inactive participants.

16. The computer readable medium as set forth in Claim 11 wherein said software for composing a new document comprises software for composing a reply message.

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17. The computer readable medium as set forth in Claim 11 wherein said software for composing a new document comprises software for composing a forwarded message.

10 18. The computer readable medium as set forth in Claim 11 wherein said software for proposing at least one list of recipients comprises software for performing a step selected from the group of:

(a) replying to all document contributors and document recipients within a current branch of a conversation tree;

15 (b) replying to document contributors and document recipients within an entire conversation tree;

(c) replying to document contributors and document recipients classified as "active participants" within a current branch of a conversation tree;

20 (d) replying only to document contributors and document recipients as "passive participants" within a current branch of a conversation tree;



- (e) replying only to document contributors and document recipients  
classified as "passive participants" within an entire tree of  
conversation;
- (f) forwarding to all document contributors and document recipients  
5 within a current branch of a conversation tree;
- (g) forwarding to all document contributors and document recipients  
within an entire conversation tree;
- (i) forwarding only to document contributors and document recipients  
classified as "active participants" within a current branch of a  
10 conversation tree;
- (j) forwarding only to document contributors and document recipients  
classified as "passive participants" within a current branch of a  
conversation tree; and
- (k) forwarding only to document contributors and document recipients  
15 classified as "passive participants" within an entire tree of  
conversation.

19. The computer readable medium as set forth in Claim 11 wherein said software  
further performs the steps of:
- 20 associating an OriginGUID value with said new document having  
a value equal to the OriginGUID value of said received document;  
associating a ParentGUID value with said new document having

a value equal to the SelfGUID of said received document; and

associating a new and unique SelfGUID value with said new document.

- 5     20.     The computer readable medium as set forth in Claim 11 wherein said software for composing a new document with new context by performing the steps of:

associating a null OriginGUID value and null ParentGUID value with said new document; and

10               associating a new and unique SelfGUID value with said new document.

21.     A system for controlling the flow of exchanged documents comprising:

15               a first document having a plurality of associated Globally Unique Identifier (GUID) values including a GUID for the document itself (SelfGUID), a GUID indicating a original predecessor document (OriginGUID) to which said received document is related, and a GUID indicating an immediate predecessor parent document (ParentGUID) to said received document;

20               a GUID extractor adapted to extract and store said first document GUID values;

              a new document composer for creating a document related to said received document;

an historical participation analyzer adapted to consider said stored  
GUID values and to classify one or more potential recipients according to a  
set of user preferences; and

a recipient list generator configured to propose at least one list of  
recipients of said new document according to said potential recipient  
classifications.

22. The system as set forth in Claim 21 wherein said GUID extractor is  
further adapted to extract a set of meta data values.

23. The system as set forth in Claim 21 wherein said recipient list generator is  
further adapted to propose a list selected from the group of a "To" list of  
addressees, a "Carbon Copy" list of addressees, and a "Blind Copy" list  
addressees.

24. The system as set forth in Claim 21 wherein said historical participating  
analyzer is further adapted to perform an analysis selected from the  
group of:

(a) designating a potential recipient as inactive if said participant has

not contributed a document within a specified period of time;

(b) designating a potential recipient as inactive if said potential

recipient has not contributed a document within a specified

recent number of messages;

(c) designating a potential recipient as inactive if said potential

recipient does not belong to a top portion of a group of

potential recipients when rank ordered by number of

5 documents contributed within a specified period of time;

(d) designating a potential recipient as inactive if said participant has

not contributed a specified threshold number of documents

within a specified time period; and

(e) designating a potential recipient as inactive if said participant has

10 not contributed documents at a rate favorably comparable to an

determined pace for an entire group of potential recipients.

25. The system as set forth in Claim 21 further comprising a termination  
notice sender for sending notification to recipients who have been classified  
15 as inactive participants.

26. The system as set forth in Claim 21 wherein said new document composer is  
further configured to compose a reply message.

20 27. The system as set forth in Claim 21 wherein said new document composer is  
further configured to compose a forward message.

28. The system as set forth in Claim 21 wherein said recipient list generator is adapted to propose a list to a set of recipients selected from the group of :

- 5 (a) all document contributors and document recipients within a current branch of a conversation tree;
- (b) all document contributors and document recipients within an entire conversation tree;
- (c) all document contributors and document recipients classified as  
10 "active participants" within a current branch of a conversation tree;
- (d) only document contributors and document recipients as "passive participants" within a current branch of a conversation tree;  
and,
- 15 (e) only document contributors and document recipients classified as "passive participants" within an entire tree of conversation.

29. The system as set forth in Claim 21 further comprising:

an OriginGUID value associated with said new document having  
a value equal to the OriginGUID value of said first document;

5 a ParentGUID value associated with said new document having  
a value equal to the SelfGUID of said first document; and

a new and unique SelfGUID value associated with said new document.

30. The system as set forth in Claim 21 in which said new document is provided

10 a new context including:

a null OriginGUID value and a null ParentGUID value associated with  
said new document; and

a new and unique SelfGUID value associated with associated with said  
new document.